

**STATE AUTOMATION SYSTEMS STUDY**

**SITE VISIT APRIL 5 - 7, 1993**

**ILLINOIS STATE REPORT**

**NOVEMBER 29, 1994**

**FINAL**

**Prepared for:**

**Diana Perez, Project Officer  
Office of Analysis and Evaluation  
Food and Nutrition Service  
3101 Park Center Drive  
Alexandria, VA 22302**

**FNS Contract No. 53-3109-2-007**

**THE ORKAND CORPORATION**

## TABLE OF CONTENTS

	<u>Page</u>
<b>STATE PROFILE . . . . .</b>	<b>1</b>
<b>1.0 STATE OPERATING ENVIRONMENT . . . . .</b>	<b>2</b>
<b>2.0 FOOD STAMP PROGRAM OPERATIONS . . . . .</b>	<b>3</b>
2.1 Food Stamp Program Participation . . . . .	3
2.2 FSP Benefits Issued Versus FSP Administrative Costs . . . . .	3
2.3 FSP Administrative Costs . . . . .	4
2.4 System Impacts on Program Performance . . . . .	4
2.4.1 Staffing . . . . .	5
2.4.2 Responsiveness to Regulatory Changes . . . . .	5
2.4.3 Combined Official Payment Error Rate . . . . .	6
2.4.4 Claims Collection . . . . .	6
2.4.5 Certification/Reviews . . . . .	7
<b>3.0 OVERVIEW OF THE SYSTEM . . . . .</b>	<b>7</b>
3.1 System Functionality . . . . .	7
3.2 Level of Integration/Complexity . . . . .	10
3.3 Workstation/Caseworker Ratio . . . . .	11
3.4 Current Automation Issues . . . . .	11
<b>4.0 SYSTEM DEVELOPMENT AND IMPLEMENTATION . . . . .</b>	<b>11</b>
4.1 Overview of the Previous System . . . . .	11
4.2 Justification for the New System . . . . .	11

## TABLE OF CONTENTS

	<u>Page</u>
4.3 Development and Implementation Activities . . . . .	12
4.4 Conversion Approach . . . . .	12
4.5 Project Management . . . . .	13
4.6 FSP Participation . . . . .	13
4.7 MIS Participation . . . . .	13
4.8 Problems Encountered During Development and Implementation . . . .	13
<b>5.0 TRANSFERABILITY . . . . .</b>	<b>14</b>
<b>6.0 SYSTEM OPERATIONS . . . . .</b>	<b>14</b>
6.1 System Profile . . . . .	14
6.2 Description of Operating Environment . . . . .	15
6.2.1 Operating Environment . . . . .	15
6.2.2 State Operations and Maintenance . . . . .	16
6.2.3 Telecommunications . . . . .	16
6.2.4 System Performance . . . . .	16
6.2.5 System Response . . . . .	16
6.2.6 System Downtime . . . . .	16
6.2.7 Current Activities and Future Plans . . . . .	17
<b>7.0 COST AND COST ALLOCATION . . . . .</b>	<b>17</b>
7.1 CIS Development Costs and Federal Funding . . . . .	17
7.1.1 CIS System Components . . . . .	19

## TABLE OF CONTENTS

	<u>Page</u>
7.1.2 Major Development Cost Components . . . . .	19
7.2 CIS Operational Costs . . . . .	20
7.2.1 Cost Per Case . . . . .	20
7.2.2 ADP Operational Cost Control Measures and Practices . . . . .	20
7.3 Illinois Cost Allocation Methodologies . . . . .	21
7.3.1 Historical Overview of CIS Development Cost Allocation Methodology . . . . .	21
7.3.2 FSP Operations Cost Allocation Methodology and Mechanics . . . . .	22
7.3.2.1 CIS Cost Pools . . . . .	22
7.3.2.2 CIS Balance Cost Pool . . . . .	23
7.3.2.3 CIS Overhead Cost Pool . . . . .	23

## APPENDICES

A	State of Illinois Exhibits . . . . .	A-1
B	Analysis of Managerial User Satisfaction . . . . .	B-1
C	Analysis of Operator User Satisfaction . . . . .	C-1

## LIST OF TABLES

<u>Table No.</u>		<u>Page</u>
2.1	Average Monthly Public Assistance Participation . . . . .	3
2.2	FSP Benefits Issued . . . . .	4
2.3	FSP Federal Administrative Costs . . . . .	4
2.4	Official Combined Error Rate . . . . .	6
2.5	Total Claims Established/Collected . . . . .	6
7.1	CIS Equipment Upgrade Allocation . . . . .	18
7.2	Annual CIS Operating Costs . . . . .	20
7.3	Development Cost Allocation . . . . .	22
7.4	CIS Cost Pool Allocations . . . . .	24

## APPENDIX A - State of Illinois Exhibits

<u>Exhibit No.</u>		
A-2.1	Response to Regulatory Changes . . . . .	A-2
A-6.1	State of Illinois Hardware Inventory . . . . .	A-4
A-7.1	CIS Budget . . . . .	A-5
A-7.2	CIS Operational Costs . . . . .	A-6
A-7.3	CIS Cost Allocation to the Food Stamp Program . . . . .	A-7

**ILLINOIS STATE REPORT**  
**Site Visit April 5 - 7, 1993**

**STATE PROFILE**

**System Name:** Client Information System (CIS)

**Start Date:** 1982

**Completion Date:** 1987

**Contractor:** Not applicable

**Transfer From:** Not applicable

**Cost:**

**Actual:** \$ 5,800,000 (est.)

**Projected:** \$10,500,610

**FSP Share:** \$ 1,249,339 (of projected costs)

**FSP %:** 11.9% (of projected costs)

**Number of Users:** 3,122

**Basic Architecture:**

**Mainframe:** IBM ES9000-820 with 21 distributed nodes utilizing  
Concurrent processors

**Workstations:** IBM 3270

**Telecommunications  
Network:** T3 backbone with major T1 nodes using  
SNA/SDLC

**System Profile:**

**Programs:** Food Stamp, Aid to Families with Dependent  
Children, Medicaid, General Assistance

## 1.0 STATE OPERATING ENVIRONMENT

The Illinois Department of Public Aid (DPA) is the State agency responsible for administering the Food Stamp Program (FSP) and other public assistance programs. DPA is a highly specialized organization in which many of the functions of various program areas are the responsibility of individual units. Organizational units that support FSP are discussed in the following section.

The Department of Public Aid has responsibility for all public assistance programs in the State of Illinois and operates a number of information systems for supporting these programs. The Bureau of Information Systems (BIS) of the DPA operates the Client Information System (CIS) and provides computer support to FSP and other program areas, including Aid to Families with Dependent Children (AFDC), Medicaid, and General Assistance (GA).

Illinois' environment is a combination of urban and rural areas served by 135 local offices in 103 counties. The population of the State in 1990 was 11,466,682. Approximately 8.9 percent of the population participated in FSP.

The level of unemployment in Illinois fell steadily from 1983 (11.4 percent) to 1989 (6.0 percent). It began to rise again in 1990, reaching 7.1 percent in 1991.

The October 1992 report, *The Fiscal Survey of States*, provides the following information compiled by the National Association of State Budget Officers:

- Illinois' nominal expenditure growth for Fiscal Year (FY) 1993 was negative, while the national average was 2.4 percent growth.
- Illinois reduced the 1992 State budget by \$257 million.
- State government employee levels decreased by 3.04 percent; only seven States experienced a more severe decrease than Illinois.
- Illinois increased both personal and corporate income taxes to obtain a revenue increase of \$48 million for FY 1993.
- The regional outlook is not particularly promising; more than half the states in the Great Lakes region, including Illinois, experienced job losses. Two states had unemployment rates above the national average; however, the regional weighted unemployment rate of 7.0 percent was lower than the national average of 7.8 percent. Per capita income growth in the region (2.1 percent) was less than the national average (2.4 percent) for per capita income growth.

## 2.0 FOOD STAMP PROGRAM OPERATIONS

Several groups are involved in FSP operations in Illinois. Food stamp policy is the responsibility of the Policy Unit, which also contains the Policy and Training Unit responsible for user documentation for all program areas. The Policy Unit reports directly to the Director of the Department of Public Aid. The Program and Field Management Unit of the Division of Field Operations, which is responsible for implementation of food stamp policy and day-to-day operations of the program, reports to the Deputy Director of Field Operations. Quality Control is a part of the Program Integrity Unit that reports to the Deputy Director of Administrative Operations, while the Collection Services and Information Systems Units are a part of the General Services operation, also reporting to the Deputy of Administrative Operations.

### 2.1 Food Stamp Program Participation

Over the past five years, participation levels for FSP and other public assistance programs have increased. Household participation in FSP increased by approximately 16.6 percent between 1988 and 1992. During the same period, the number of AFDC cases increased by 3.6 percent. Participation levels in Illinois for FSP and other program areas are shown in Table 2.1 below. General Assistance (GA) participation levels are limited to Chicago.

**Table 2.1 Average Monthly Public Assistance Participation**

Program	1992	1991	1990	1989	1988
AFDC					
Cases	231,311	228,438	214,361	210,580	223,215
Individuals	690,879	688,815	650,858	640,660	678,045
Foster Care	34,726	29,035	25,516	23,618	21,591
GA					
Cases	47,579	82,207	70,739	67,477	82,769
Individuals	53,234	88,947	76,817	74,157	90,938
FSP					
Households	485,963	467,753	424,093	401,886	416,765
Individuals	1,156,092	1,111,471	1,023,903	986,623	1,030,668
Medicaid	1,894,168	1,200,490	1,055,800	1,005,988	1,028,192

### 2.2 FSP Benefits Issued Versus FSP Administrative Costs

The ratio of benefits issued to FSP administrative costs has improved somewhat from 13.5:1 in 1988 to 19.7:1 in 1992.



Illinois' average monthly benefit issuance per household over the last five years, as provided in Table 2.2, has increased each year.<sup>1</sup>

**Table 2.2 FSP Benefits Issued**

	1992	1991	1990	1989	1988
Average Monthly Benefit Per Household	\$182.55	\$173.99	\$166.57	\$151.14	\$146.06

### 2.3 FSP Administrative Costs

Illinois' Food Stamp Program administrative costs for the past five years are provided in Table 2.3.<sup>2</sup> Total administrative costs fluctuated during the period, but average cost per household has decreased steadily since 1989.

**Table 2.3 FSP Federal Administrative Costs**

	1992	1991	1990	1989	1988
Total FSP Federal Admin. Cost	\$54,197,646	\$55,366,994	\$54,632,891	\$55,612,055	\$53,812,525
Avg. Federal Admin. Cost Per Household Per Month	\$9.25	\$10.02	\$10.89	\$11.52	\$10.80

### 2.4 System Impacts on Program Performance

The following areas were examined to explore the impact automation has had upon the Food Stamp Program within the State of Illinois:

- Staffing
- Responsiveness to Regulatory Changes
- Combined Official Payment Error Rates
- Claims Collection

<sup>1</sup> The number of households and benefit amounts are data reported in the FNS *State Activity Reports* for each year.

<sup>2</sup> The number of households and FSP Federal administrative costs are data reported in the FNS *State Activity Reports* for each year.

- Certification/Reviews

#### **2.4.1 Staffing**

Current staffing levels for the Illinois Department of Public Aid are as follows:

- Registration workers, 278
- Eligibility worker (EW) - intake, 738
- EW - on-going, 1,968
- Food stamp issuance center worker, 25
- Local office administrator, 113

State staff indicated that five to seven percent reductions in caseworker staffing levels have occurred during the past five years, primarily due to budgetary restrictions. The impact that the system had on staffing levels was considered to be negligible.

The average monthly caseload per worker has increased by 15 to 20 percent during this same time period; case backlogs (as measured by end-of-month pending cases) have increased by 12 percent. Backlogs reflect approximately 25,000 applications, 7,300 for new food stamp recipients.

#### **2.4.2 Responsiveness to Regulatory Change**

Based on the required implementation dates given in Exhibit A-2.1 in Appendix A, State staff indicated that Illinois was unable to meet Federal time frames for implementing six of the 14 regulatory changes listed. Regulations implemented after the Federally required date included: codes 1.3 and 1.4, the Mickey Leland Memorial Domestic Hunger Relief Act, provisions 273.8(e)(17) and 273.9(d)(5)(i); code 2.1, the Administrative Improvement and Simplification Provisions of the Hunger Prevention Act, provision 273.8(e)(5), etc.; and codes 3.1, 3.2, and 3.4, Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act, provisions 273.9(C)(1)(ii), 273.9(c)(14), and 273.10(a)(1)(ii). For all changes that were implemented late, State staff indicated that the regulatory change was considered a low priority relative to other program changes and on-going projects.

State staff indicated two problems associated with the required implementation dates for regulatory changes. First, the required date provided on the chart for code 3.2 differed from the date that the staff considered to be the required implementation date for the change. Second, State staff believed that Federal regulations often were not issued, or sufficiently clarified, soon enough for States to meet the implementation targets.

Other changes, codes 4.1, 4.2, and 4.3, related to issuance, were perceived as unnecessary because Illinois already was following the policy mandated by the Federal regulation.

### 2.4.3 Combined Official Error Rates

The Illinois official combined error rate, as shown in Table 2.4, has fluctuated year to year and declined overall since 1988. The error rate decreased in 1989, increased in 1990, decreased in 1991, and increased slightly again in 1992.

**Table 2.4 Official Combined Error Rate**

	1992	1991	1990	1989	1988
Combined Error Rate	9.97	9.85	10.77	10.28	10.52

### 2.4.4 Claims Collection

The amount of claims collected as a percentage of claims established in Illinois increased steadily from 1987 to 1991, increasing more than five fold in this period.

The percentage of claims collected is affected by the total number of claims established, whether the individual is still receiving benefits, the amount of available assets, and other factors.

Table 2.5 presents claims collection data indicating the total value of collections and the percentage of claims established that were collected. During the period from 1987 to 1991, the dollar value of claim collections increased each year.

**Table 2.5 Total Claims Established/Collected**

	1992	1991	1990	1989	1988
<b>Total Claims Established</b>	\$16,808,229	\$20,646,757	\$13,609,910	\$19,871,068	\$21,748,349
<b>Total Claims Collected</b>	\$9,670,580	\$8,190,276	\$6,621,211	\$6,204,819	\$3,716,898
<b>As a % of Total Claims Established</b>	57.5%	39.6%	48.6%	31.2%	17.0%

#### 2.4.5 Certification/Reviews

The Family Assistance Management Information System (FAMIS) Client Information System has been operational since late 1987. The system was certified by the Department of Health and Human Services (DHHS) in 1988. A post- implementation review was conducted by FNS in 1989.

### 3.0 OVERVIEW OF THE SYSTEM

This section provides an overview of CIS functionality and level of integration.

#### 3.1 System Functionality

CIS is a distributed system that supports the AFDC, Medicaid, Food Stamp, and General Assistance programs in the State of Illinois. Eligibility determination for the Title IV-E Foster Care population also is supported by the system.

Major areas of CIS functionality addressed in this section include:

- **Registration.** Registration clerks accept information from the client orally and enter data into the system. This screening process is used to determine if the client is, or has been, known to the system and if he or she is eligible for expedited service. A variety of data are entered into the system during this phase of the process, including the client's name, Social Security number (SSN), address, sex, race, and other basic screening information, e.g., income.

The system performs a search for duplicate participation at this time and also accesses food stamp national disqualification files (DRIPS) and State Department of Labor (DoL) files. The search is performed for each household member and is performed in "background" mode. The system saves the entire list of household members as part of the registration process.

Registration is usually performed by a receptionist or clerk who is responsible for reviewing potential matches from the search process. If expedited service is warranted, an appointment is made with an eligibility worker for the same day. For regular service, a future appointment may be made. All scheduling functions are manual. Efforts are made to process applicants as quickly as possible regardless of their expedited status.

- **Eligibility Determination** The eligibility interview is held with an eligibility worker who enters data directly into the system. The interactive interview capability of CIS prompts the worker by displaying screens in sequence based upon answers to previous questions. Immediate on-line edits are employed and mandatory fields are defined within the system. All screens presented by the

system must have an entry or a text comment indicating that the screen is not relevant before it may be by-passed by the interviewer.

The system determines the applicant's eligibility from information entered during the interview process; however, the worker must indicate which household members belong to specific assistance groups within the household. The system does not automatically determine the composition of these groups.

Eligibility workers may set a date by which missing verification materials should be received; the system saves this information to prompt the worker and to generate client notices. A pending application report, which is also available on-line, is printed each morning at the local office.

- ***Benefit Calculation.*** Benefit calculation is performed automatically by the system based upon entered data. The worker must authorize the benefit calculation results. The system may require benefits to have a second party authorization, depending upon the security authorization level of the assigned worker.
- ***Benefit Issuance.*** Issuance methods used in Illinois include direct mail and over the counter (OTC). Approximately 15 percent of all benefits are issued via direct mail to the clients. Most of the remaining issuance in the State is conducted at currency exchanges. Illinois contracts with currency exchanges for OTC issuance and with a private association for itinerant site issuance in a number of rural counties.

An on-line Electronic Benefit Transfer (EBT) pilot is currently being considered for the Springfield area. An Implementation Advanced Planning Document (IAPD) for EBT issuance was awaiting Federal approval as of April 1993.

Information regarding undelivered and stolen coupons is entered into the system by the assigned worker via on-line terminals. Returned benefits information is entered into the system by central issuance office personnel. Replacement benefits can be requested by the worker via the system and will be re-issued in the next daily issuance process, depending upon policy and FNS regulations.

An on-line display of the issuance history covers the previous 24 months with the remainder of the history stored on microfiche and is available upon request.

Issuance files are created monthly for all on-going cases and daily for new approvals and other special issuances. Expedited issuance is possible the next working day after application.

The issuance center uses modern Bell and Howell equipment capable of utilizing bar coding to determine coupon amounts and denominations. The system also checks zip codes against the address and adds missing information.

- **Notices.** The system generates both automatic and worker-initiated notices to households. Eligibility worker input to notices is required by the system and may be entered on-line. Automatic generation of notices is limited to notice of benefits and denials. Workers may not add free-form text into any notice.

Notices combine AFDC and FSP information. The system also generates notices for Medicaid and Child Welfare clients. State staff could not provide the number of notices generated.

- **Claims System.** The claims system in Illinois is a separate system, the Accounts Receivable System (ARS), which is linked to the eligibility system. Data are exchanged between the two systems on a daily basis. The claims system tracks the status of the claim, calculates the monthly recoupment amount and subtracts it from the monthly benefit amount, generates a notice to the client advising of underpayment or overpayment, and automatically creates a collection record. The eligibility worker enters the cause of underpayment or overpayment and whether fraud is suspected.
- **Computer Matching.** Computer matching is performed regularly for on-going cases, as well as at initial registration and for quality control purposes. All "hits" are reported to the eligibility worker who must resolve any discrepancies. Hits generated through on-line matching do not require any specific response from the worker. Resolution must be entered within 45 days or an overdue list is generated and will continue to be generated until resolution is accomplished or the benefits are terminated.

Data from Missouri recipient and wage files are also used for computer matching purposes either via batch or by on-line pass through to that system.

The worker may request a search of an individual database at any time. This request will run in batch mode and the results will be returned via paper report on the next working day.

Illinois' system automatically changes the client's budget figures if computer matching indicates that information differs from reported information. Clients are notified whenever their benefits are reduced or increased because of automated changes to the budget amounts caused by computer matching.

- **Alerts.** Alerts include the following types of actions:
  - Discrepancies reported through matching against State DoL files
  - Notices that are scheduled to be sent
  - Redeterminations due

State staff responses indicated the availability of on-line alerts; however, this feature was not available during a system demonstration. Paper reports are the



Each sub-system has a logical role in the eligibility determination, issuance, and other food stamp related functions. Integration of these various sub-systems is virtually transparent to the user. To users, CIS appears to be as integrated as most other FAMIS systems that are comprised of a single piece rather than a series of functional areas or sub-systems. From a technical perspective, the distributed, over-night batch update design of the Illinois system may not be as sophisticated as some newer designs; however, given the high transaction volumes and efficient processing afforded by this design, it serves the purpose for which it was designed.

### **3.3 Workstation/Caseworker Ratio**

In Illinois, a terminal is provided for each worker who interacts with the system. In addition to intake and on-going eligibility workers, registration workers and EW supervisors also have dedicated terminals.

### **3.4 Current Automation Issues**

The major automation issues related to CIS include:

- Modification of the CIS database to include Child Support Enforcement
- Implementation of an EBT pilot
- Addition of an on-line policy manual feature

Despite these plans, State staff consider CIS to be in a "steady state" with no major enhancements planned for the near future.

## **4.0 SYSTEM DEVELOPMENT AND IMPLEMENTATION**

This section of the report discusses the development and implementation approach used in Illinois during the CIS project.

### **4.1 Overview of the Previous System**

Before CIS was implemented, Illinois operated separate, batch-oriented systems for the major public assistance programs. Instead of using generic caseworkers, workers specialized in a particular program area.

### **4.2 Justification for the New System**

The State of Illinois recognized the need for an on-line, statewide automated system that combined the major public assistance program areas several years before CIS development was initiated. The State believed that a new system would enhance its ability to serve clients in an accurate and timely manner and reduce the program errors associated with local level delays, work flow bottlenecks, and lack of immediate access to statewide databases.



### **4.3 Development and Implementation Activities**

Internal discussions relating to the need for a new public assistance system were on-going for a number of years before the initial Advanced Planning Document (APD) submission in 1986. Enhancement plans to improve existing processes and develop new features for the existing system were combined with the interactive interviewing approach to form the basis for CIS in 1986. Illinois submitted an APD for system development later that year. An APD Update (APDU) was submitted in 1987 requesting additional funding, primarily for equipment and telecommunication upgrades to support the system.

The Automated Case Management module was implemented on July 1, 1987 and the Automated Intake function was present at that time. A schedule for the entire project, including activities related to the implementation of various features from 1987 to the present, was not provided.

### **4.4 Conversion Approach**

The Illinois conversion approach included the implementation of the automated case intake module prior to Automated Case Management (ACM). The calculation modules were the first part of the system to be completed and installed at the pilot site. As additional features were completed, new modules were added to the system for all Automated Intake (AI) sites. The intake system was expanded to additional sites on a predetermined schedule, and, as offices were added to the network, access to all features currently in use was provided.

The approach used for staged conversion was designed to reduce the impact of decreased staff availability during the training phase. This was accomplished by maximizing the use of staff trainers. Trainers from State Staff Development received instructions from the Information Systems staff regarding specific system features and overall system operation. Lesson plans were then developed and classroom training sessions were held at the local sites.

Training was also delivered on the use of the Combined Application Form (CAF). Training sessions were attended by receptionists, screeners, eligibility workers, and supervisors.

An Implementation Team was formed to assist in conversion and training as well as to respond to emergency situations that could arise in individual offices. Staff indicated that the implementation teams were very successful in identifying and seeking timely resolution to problems that arose during implementation. State staff believed this led to a high level of user acceptance and satisfaction with the system.

Conversion to ACM was made easier by the line staff's familiarity with the mechanical aspects of CIS through the use of the Automated Intake implementation experience. Screens for this system module were patterned after the manual forms being used by EWs. Training for the ACM conversion required that EW supervisors be brought into the

State's central offices, where members of Staff Development conducted training. These supervisors then returned to their local offices and trained their employees to use the new system.

#### **4.5 Project Management**

The management information systems (MIS) area provided the project manager for the CIS project and prepared all project related documents including APDs. The project was led and directed by MIS from its inception to statewide implementation. The project manager was 100 percent assigned to the project. The project manager's background included 16 years of public assistance program experience, 14 years of MIS experience, and 6 years of project management experience. The skills listed as being most important to the project tended to reflect the technical orientation of the project leadership. These skills included estimating, public assistance program knowledge, programming, and analysis skills.

The State did not use an implementation contractor during this project. Illinois ran the project internally, utilizing contractors only for technical tasks such as coding.

User groups and MIS staff were involved in CIS project management. User groups were utilized during the course of the project and participated in all phases. MIS staff were involved in all phases of the project and had the ability to establish requirements, make recommendations, and exercise review and approval authority.

#### **4.6 FSP Participation**

Three Food Stamp Program personnel participated on the project team, which also included two MIS staff. The same food stamp personnel remained on the project for its duration.

FSP personnel, along with AFDC and Medicaid management staff, participated in the project steering committee. Field staff were not involved in the project at this level.

#### **4.7 MIS Participation**

As mentioned earlier, MIS had extensive involvement during all phases of the project. All development was performed by internal State MIS staff with assistance from technical contractors. MIS managed the contractors used for programming, prepared the APDs, supplied the project manager, and maintained administrative control during the course of the project.

#### **4.8 Problems Encountered During Development and Implementation**

State staff did not provide a great deal of information about difficulties during system development and implementation efforts. State staff indicated that changes in system scope and functional requirements presented some problems. Illinois staff also mentioned

that the lack of an interactive interviewing model from which to draw guidance in their cost and time frame estimates was a barrier to conceptualizing the system.

## **5.0 TRANSFERABILITY**

The Illinois system was developed internally without the use of a planning, quality assurance, or implementation contractor. Other states' systems were not used as the basis for CIS design or code.

A transfer of the Illinois system would be difficult for several reasons. Because the system was developed without contractor assistance, there is no independent source of technical information or experience with the system that could be used to assist other States in the transfer process. Its modular design, which includes numerous sub-systems developed over several years, also makes a transfer more difficult.

There are characteristics of the system, however, that make it attractive as a transfer candidate, with respect to a conceptual design transfer rather than an actual code transfer. The distributed design may be of interest to larger States with heavy transaction processing requirements or those with limited telecommunication systems. The background processing nature of the eligibility determination/benefit calculation module is not unique, but it does appear to offer efficient processing without undue delays for the client or end user. The "Node" concept, which utilizes mini-computers at selected sites for processing of most data, allows upgrades to be performed as necessary without expensive central mainframe expansions and offers a degree of growth flexibility not found in most central processor designs.

CIS allows a proven technical approach to extend its life cycle at a relatively modest cost. Functional features of the system appear to be consistent with current thinking about the role of the worker and need for combined public assistance processing of clients. When first conceived, the interactive interviewing nature of the system was at the forefront of client service thinking in the public assistance field. CIS is a pragmatic and effective approach to high volume processing with some innovative functional features.

## **6.0 SYSTEM OPERATIONS**

The following section provides a description of CIS. The description includes a profile of system components and a discussion of the system operating environment.

### **6.1 System Profile**

The components supporting the Client Information System are as follows:

- **Mainframe:** IBM ES9000-820

- **Software:** MVS/ESA, IMS, CICS, RACF, COBOL II, TELON
- **Disk:** IBM 3380/3390
- **Tape:** STK 4480 Cartridge
- **Printers:** IBM 3800 Laser  
IBM 4248 Impact
- **Front Ends:** IBM 3745
- **Workstations:** IBM 3270
- **Telecommunications:** T3 SNA/SDLC network between five sites with multiplexed T1s at 60 nodes. Tail circuits (5000 - 6000) from the T1 nodes run at 9.6 KB.

A detailed listing is provided as Exhibit A-6.1 in Appendix A.

## **6.2 Description of Operating Environment**

The operating environment consists of several components. This section describes these components, which include the current operating environment, maintenance, telecommunications, performance, response time, system downtime, and plans for future hardware and software enhancements.

### **6.2.1 Operating Environment**

A centralized data center within the Illinois Department of Public Aid's Bureau of Information Systems provides operational support for CIS. The data center operates on a seven day, 24 hour schedule. The on-line processing window runs from 7:00 a.m. until 6:00 p.m. Batch processing begins at 6:00 p.m. and the batch window remains open until 6:00 a.m.

Illinois uses Concurrent 3280 minicomputers as distributed processing nodes throughout the State. There are 21 nodes installed that enable the geographic area being supported to inquire, process, and edit client registration information and store the data for later transmission to the host for overnight batch processing. If the requested inquiry record is not available at the node, the minicomputer can access the host master file and download the information for further processing.

Information was not available about the uninterruptible power supply capability at the data center or the disaster recovery plan in place to support CIS and the data center.

### **6.2.2 State Operations and Maintenance**

A staff of eight programmers and analysts from BIS support CIS. BIS staff develop and test software on Concurrent minicomputers and upload it to the mainframe for inclusion in the master program libraries. Updated programs can then be downloaded from mainframe to every node, when needed, to support the application. A steering committee, which meets monthly, reviews the proposed changes to CIS.

State staff believe that Illinois does not have problems attracting and retaining qualified staff to support application software. CIS currently has an adequate staff and was fully staffed for the development and implementation phases of the project.

### **6.2.3 Telecommunications**

Illinois has 60 telecommunications nodes throughout the State. A statewide DS3 (T3) backbone network connects four major points-of-presence (POPs) -- located in Chicago, Springfield, St. Louis, and Champaign -- to the data center in Springfield using the SNA/SDLC protocol. From each of these POPs, T1 circuits connect to the other 56 nodes that are then connected via multiplexors to 4.8 KB or 9.6 KB circuits that tie to each local office. Nearly 80 percent of the total State communications traffic utilizes the backbone. Remaining volume is connected directly to the data center via dedicated networks.

The telecommunications network operates at a 99.83 percent reliability level and is supported by a network control center that performs planning, installation, monitoring, and repair activities.

### **6.2.4 System Performance**

The CIS application uses approximately 50 percent of ES9000-820 processor resources. Average utilization for the first shift is 83 percent, with peaks approaching 90 percent utilization. Illinois staff stated that the State will need to upgrade the processor in the near future to alleviate processing bottlenecks caused by the high utilization levels.

BIS staff did not identify any specific, on-going performance problems or issues that were of particular concern.

### **6.2.5 System Response**

The State does not capture response times that reflect the performance of the system at the user terminal. BIS staff estimated that response times range from three to five seconds depending on the transaction type and the location -- at the node or mainframe - of data.

### **6.2.6 System Downtime**

State staff were unable to provide any information about system downtime.

## **6.2.7 Current Activities and Future Plans**

Illinois plans to upgrade the ES9000-820 to a larger system within the next 12 months.

## **7.0 COST AND COST ALLOCATION**

This section addresses Illinois CIS development costs, system operating costs, and the cost allocation methodology applied to on-going CIS operations.

### **7.1 CIS Development Costs and Federal Funding**

CIS development continued through June 1987; full implementation was completed on July 1, 1987. A CIS APD dated September 1986 provided seven years of costs associated with CIS development. Exhibit A-7.1 in Appendix A, CIS Budget, provides a breakdown of the budgeted costs and the FNS share of these costs. The table shows that CIS was projected to cost \$110.5 million; the FNS share was 16.5 percent, or \$18.3 million. The total CIS cost included projected operations costs of \$77.8 million with an FNS share of \$12.6 million. CIS development costs were budgeted at \$10.5 million and the FNS share was set at \$1,249,339.

It is unclear from the documentation whether FY82 through and including FY86 costs presented in the APD budget were actually incurred during those years. In January 1988, the actual cost of CIS software development was reported to be \$5.8 million, 61 percent less than the \$10.5 budgeted amount through the same period.<sup>3</sup> Equipment and staff training costs were reported to be \$16 million and \$2.6 million, respectively. No additional information documenting the actual costs for CIS for the period beginning in FY82 and continuing through implementation was made available.

Documentation addressing FNS funding approvals for FY82 through CIS implementation was limited. Available correspondence showed that:

- In May 1985, FNS approved a 75 percent Federal financial participation (FFP) amount of \$502,156 based on a \$669,541 FNS share of costs for the Auto INTAKE System.<sup>4</sup>
- In August 1986, FNS approved a 50 percent FFP of \$51,354 based on a \$102,707 FNS share of a pilot Auto INTAKE system.<sup>5</sup>

---

<sup>3</sup>Illinois Department of Public Aid, FAMIS Overview, January 1988.

<sup>4</sup>Letter, 5/6/85

<sup>5</sup>Letter, 8/6/86

- In December 1986, FNS increased funding for the Auto INTAKE System and implementation of the Income Eligibility and Verification System (IEVS) from \$502,156, the May 1985 approval amount, to \$903,071. The FFP was 75 percent based on the Food Stamp Program share of \$1,204,095.<sup>6</sup>

The Food Stamp Program incurred additional CIS development-related costs following CIS implementation. In August 1988, Illinois submitted an APD Update (APDU) to modify the existing system to meet the requirements of the U.S. Department of Agriculture, Food and Nutrition Service ADP Model Plan.<sup>7</sup> The projected cost of this enhancement, which would be borne entirely by the Food Stamp Program, was \$537,600 for software modifications.

The APD also requested additional equipment and a network upgrade projected to cost \$1,319,000. The costs of the equipment and network upgrade were to be allocated to FNS, the Family Support Administration (FSA), and the Health Care Financing Administration (HCFA) in accordance with the Illinois Cost Allocation Plan (CAP) approved at that time. Table 7.1, CIS Equipment Upgrade Allocation, shows the percentage and the associated dollar amount allocated to each CIS program based on the Illinois Cost Allocation Plan in effect in 1988.

**Table 7.1 CIS Equipment Upgrade Allocation**

<b>CIS PROGRAM</b>	<b>% ALLOCATION (per 1988 CAP)</b>	<b>PROGRAM SHARE</b>
<b>AFDC (Title IV-A)</b>	32.74%	\$431,841
<b>Food Stamp Program</b>	25.00%	\$329,750
<b>Medicaid (Title XIX)</b>	24.78%	\$326,848
<b>Refugees</b>	.30%	\$3,957
<b>Other State programs</b>	17.18%	\$226,604
<b>TOTAL</b>	100.00%	\$1,319,000

Documentation relating to the FNS approval and/or the FFP for reimbursement for this APDU was not available. FSA approval was granted on February 14, 1989.

In late 1989, FNS withheld approval of an APD for an enhancement to CIS to support the Medical Assistance No Grant (MANG) program. The APD request totaled \$1,688,900. Of this amount, \$206,000 was budgeted for system development costs, which would have been directly charged to Title XIX. The remaining \$1,482,900 was budgeted

<sup>6</sup>Letter, 12/18/86

<sup>7</sup>Letter, 9/27/88.

for equipment upgrades. The FNS share for equipment would have been \$388,520, representing 26.2 percent of the equipment costs, to be funded at 50 percent FFP or \$194,260.

FNS maintained that, since the equipment was being acquired to support the Medicaid Program, there was no apparent benefit to the Food Stamp Program. Illinois contended that, in an integrated system, any improvement to the hardware configuration benefits all supported systems, and, more importantly, HCFA and FSA had assumed their share of costs for equipment and network enhancements purchased for the FNS Service ADP Model Plan.<sup>8</sup> Documentation explaining how the MANG equipment funding issue was resolved was not available.

A 1990 APD for Child Support Enforcement allocated 23.27 percent of equipment costs to the Food Stamp Program. The equipment was projected to cost \$494,000; the food stamp share was \$114,954. There was no additional documentation relating to FNS approval of this APD.

#### **7.1.1 CIS System Components**

The Illinois Client Information System supports the Food Stamp, AFDC, Medicaid, General Assistance, and other State Programs.

#### **7.1.2 Major Development Cost Components**

Exhibit A-7.1 shows the projected costs for CIS broken into three specific components:

- CIS development costs of \$10.5 million accounted for 9.5 percent of total system costs; the FNS share was \$1.25 million.
- CIS DDP network costs of \$22.2 million accounted for 20 percent of total system costs; the FNS share was \$4.45 million.
- CIS operations costs of \$77.8 million accounted for over 70 percent of the total system costs; the FNS share was \$12.6 million.

The exhibit also shows that the budgeted share of CIS allocated to the Food Stamp Program increased dramatically from FY86 to FY87:

- Total CIS cost share increased by 69 percent.
- CIS development cost share increased by over 49 percent.
- CIS DDP network and operations costs share increased by 69 percent.

---

<sup>8</sup>Letter, 1/25/90.



The reasons behind this share increase were not evident from the documentation.

## 7.2 CIS Operational Costs

Table 7.2, Annual CIS Operating Costs, presents CIS operating costs for two complete years and for one quarter of the current year.

**Table 7.2 Annual CIS Operating Costs**

COST POOL	FEDERAL FISCAL YEAR		
	1991	1992	1993 (One Qtr)
<b>CIS TOTAL</b>	3,561,888	3,797,420	966,407
<b>FNS SHARE</b>	<b>692,164</b>	<b>760,683</b>	<b>175,886</b>
<b>CIS BALANCE TOTAL</b>	563,425	570,773	203,898
<b>FNS SHARE</b>	<b>154,005</b>	<b>157,293</b>	<b>51,443</b>
<b>CIS OVERHEAD TOTAL</b>	10,226,185	11,182,043	1,761,462
<b>FNS SHARE</b>	<b>2,050,201</b>	<b>2,243,754</b>	<b>320,586</b>
<b>TOTAL CIS OPERATIONS</b>	14,351,498	15,550,236	2,931,767
<b>FNS SHARE</b>	<b>2,896,372</b>	<b>3,161,732</b>	<b>547,915</b>
<b>FNS SHARE %</b>	20.18%	20.33%	18.69%

Appendix A, Exhibit 7.2, CIS Operational Costs, provides a detailed quarterly breakout of CIS operating costs for Federal Fiscal Year (FFY) 1991, FFY 1992, and the first quarter of FFY 1993.

### 7.2.1 Cost Per Case

Based on a food stamp monthly caseload of 485,963 households in 1992, the average monthly cost per case was \$0.54.

### 7.2.2 ADP Operational Cost Control Measures and Practices

Personnel are assigned an organization code which identifies the Bureau, Section, and Unit to which each person is assigned. The organization code is used to identify the cost pool into which the personal service and fringe benefit costs of an employee are accumulated.

All staff time charged to CIS via the organization code is *certified* by the appropriate section manager in the Bureau of Information Systems. The certifications are submitted to the Bureau of Fiscal Operations, Federal State Co-ordination Unit, five working days

after the end of the month. A certified personnel listing is then generated for use in identifying who charges to the CIS cost pool and in what percentage. The allocation to CIS and the Food Stamp Program is calculated from this listing.

### **7.3 Illinois Cost Allocation Methodologies**

This section addresses the methodologies used to allocate CIS development costs to programs supported by CIS and operations costs accumulated by CIS to programs supported by the system.

The cost pools used to collect and allocate operations costs are described below.

#### **7.3.1 Historical Overview of CIS Development Cost Allocation Methodology**

The cost allocation methodology used to determine program allocations for CIS from FY82 through implementation was not available. Exhibit A-7.1 in Appendix A shows the budgeted allocations presented in the 1986 APD. For that APD, costs were distributed based on the Cost Allocation Plan for the quarter ending June 30, 1986. These percentages are shown in Table 7.3, Development Cost Allocation, column (a). However, for the INTAKE System Development and Income Maintenance Worker enhancements, costs were distributed based on the percentage of the system attributed to AFDC (77.18 percent); the remaining 22.82 percent was distributed among the other CIS-supported programs. These allocations are shown in column (b).

The 1990 APD for a CIS enhancement to support Child Support Enforcement allocated equipment costs to all programs. The allocation is presented in column (c) of Table 7.3.

**Table 7.3 Development Cost Allocation**

CIS PROGRAM	1986 APD		1990 APD CHILD SUPPORT ENFORCEMENT
	(a) CIS DEVELOPMENT & IMPLEMENTATION	(b) INTAKE/INCOME MAINTENANCE WORKER ENHANCEMENT	
AFDC (Title IV-A)	32.92%	77.18%	32.59%
Medicaid (Title XIX)	22.82%	7.76%	27.60%
Title XX	2.13%	.72%	1.68%
FSP	23.10	7.86%	23.27%
Refugees	.35%	.12%	.33%
Other State Programs	18.68%	6.36%	14.53%

Appendix A, Exhibit A-7.3, CIS Cost Allocation to the Food Stamp Program, illustrates the procedures followed for allocating CIS operations costs to the Food Stamp Program using these workers as the basis for allocation.

The CIS cost pool accumulates both direct and allocated operation costs, as follows:

- **CIS Direct Charges.** The CIS cost pool collects personnel service and fringe benefit costs of personnel in the Bureau of Information Systems who are assigned exclusively to CIS functions, including Client Information Systems Section, Workfare and Data Exchange Unit within the Agency Administrative Information System Section, and Recipient Ledger Unit with the Agency Administrative Information System Section.
- **CIS Allocated Cost Pools.** Table 7.4, CIS Cost Pool Allocations, lists the organizations within the Bureau of Information Systems that allocate personnel service and fringe benefit costs to the CIS Cost Pool. The basis for each allocation is provided.

#### **7.3.2.2 CIS Balance Cost Pool**

The costs in this pool are for personal services and fringes that cannot be directly tied to a specific CIS program. These costs are allocated based on INTAKE, Caseworker, and Administrative/Clerical costs in much the same way as the allocations for the CIS cost pool. All AFDC and Title IV costs, however, are removed from the total.

#### **7.3.2.3 CIS Overhead Cost Pool**

The cost pool accumulates non-person services, training, computer center, travel, and other related costs. The percentage allocation is the same as that calculated for the CIS cost pool allocation.

**Table 7.4 CIS Cost Pool Allocations**

<b>BUREAU OF INFORMATION SYSTEM ORGANIZATIONS</b>	<b>ALLOCATION BASIS</b>
Distributive Data Processing Unit within the Technical Service Section	Six staff positions and one part-time supervisor allocated based on Certified Listing
Data Control Unit with the Operations Section	Number of CIS reports processed ÷ Total number of reports processed
I/O Unit with the Operations Section	CPU time for CIS jobs submitted through I/O Control Unit ÷ Total CPU time for all jobs submitted through I/O Control Unit
Production Control Evening Unit with the Operations Section	Number of CIS reports processed by Production Control Evening Unit ÷ Total number of all reports processed by Production Control Evening Unit
Teleprocessing Support Unit with the Operations Section	Number terminals statewide dedicated to CIS ÷ Total number of terminals statewide
Library Maintenance Unit with the Operations Section	Number of CIS program and PROC activity sheets processed and the number of CIS Direct Access Storage Device (DASD) space requests ÷ total of all programs and PROC activity sheets and all DASD space request sheets processed
Data Preparation Tape Library Unit within the Operations Section	Number of CIS magnetic tapes handled ÷ Total of all magnetic tapes handled

**APPENDIX A**

**STATE OF ILLINOIS**

**EXHIBITS**

**Exhibit A-2.1**  
**Response to Regulatory Changes**

Code	Regulation	Provision	Federally Required Implementation Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
1.1	1: Mickey Leland Memorial Domestic Hunger Relief Act	1: Excludes as income State or local GA payments to DHHS provided as vendor payments. 273.9(c)(1)(ii)(F)	8/1/91	N/A	N/A	N/A
1.2	1: Mickey Leland Memorial Domestic Hunger Relief Act	2: Excludes from income annual school clothing allowance however paid. 273.9(c)(5)(i)(F)	8/1/91	N/A	N/A	N/A
1.3	1: Mickey Leland Memorial Domestic Hunger Relief Act	3: Excludes as resource for Food Stamp purposes, household resources exempt by public assistance (PA) and SSI in mixed households. 273.8(e)(17)	2/1/92*	N	Y	Y - Policy
1.4	1: Mickey Leland Memorial Domestic Hunger Relief Act	4: State agency shall use a standard estimate of shelter expense for households with homeless members. 273.9(d)(5)(i)	2/1/92*	N	N	Y - Policy
2.1	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	1: Extended resource exclusion of farm property and vehicles. 273.8(e)(5),etc.	7/1/89	N	N	Y - Policy
2.2	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	2: Combined initial allotment under normal time frames. 274.2(b)(2)	1/1/90	Y	Y	Y - Policy
2.3	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	3: Combined initial allotment under expedited service time frames. 274.2(b)(3)	1/1/90	Y	Y	Y - Policy

**Exhibit A-2.1**  
**Response to Regulatory Changes**

Code	Regulation	Provision	Federally Required Implementation Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
3.1	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	1: Exclusion of job stream migrant vendor payments. 273.9(c)(1)(ii)	9/1/88	N	Y	Y - Policy
3.2	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	2: Exclusion of advance earned income tax credit payments. 273.9(c)(14)	1/1/89*	N	Y	Y - Policy
3.3	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	3: Increase dependent care deductions. 273.9(f)(4), etc.	10/1/88	Y	Y	Y - Policy
3.4	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	4: Eliminate migrant initial month proration. 273.10(a)(1)(ii)	9/1/88	N	Y	Y - Policy
4.1	4: Issuance	1: Mail issuance must be staggered over at least ten days. 274.2(c)(1)	4/1/89	No changes required	N/A	N/A
4.2	4: Issuance	2: Limitation on the number of replacement issuances. 274.6(b)(2)	10/1/89	No changes required	N/A	N/A
4.3	4: Issuance	3: Destruction of unusable coupons within 30 days. 274.7(f)	4/1/89	No changes required	N/A	N/A

\* These dates were changed after the State completed this form and the site visit occurred; therefore, the responses to these particular regulatory changes may be inaccurate.



**Exhibit A-6.1  
State of Illinois  
Hardware Inventory**

Component	Make	Acquisition Method	Number/Features
<b>CPU</b>			
ES9000-820 Production/Test	IBM	Purchase/Lease-back	128 channels, 256 MB main storage, 256 MB extended storage, 184 MIPS
<b>DISK</b>			
3380/3390	IBM	Purchase/Lease-back	1.6 Terabytes (no device count available)
<b>TAPE</b>			
Cartridge Drives	STK	Purchase/Lease-back	4480 (176)
<b>PRINTERS</b>			
Impact	IBM	Purchase/Lease-back	4248
Laser	IBM	Purchase/Lease-back	3800 (1)
<b>FRONT END PROCESSOR</b>			
FEP	IBM	Purchase/Lease-back	3745 (5)
<b>REMOTE EQUIPMENT</b>			
Nodes	Concurrent	Purchase	Node Processors (21)
Terminals	IBM	Purchase/Lease-back	3270

**Exhibit A-7.1**  
**CIS Budget**  
**(from September 1986 APD)**

BUDGET GROUP	FY82	FY83	FY84	FY85	FY86	FY87	FY88	TOTAL
CIS DEVELOPMENT	84,082	1,351,210	1,414,454	1,814,175	2,457,804	3,378,885	0	10,500,610
FNS SHARE	3,278	92,572	89,803	135,832	275,241	652,613	0	1,249,339
FNS %	3.90	6.85	6.35	7.49	11.20	19.31	0	11.90
CIS DPP NETWORK	0	192,123	1,294,682	1,367,480	4,382,666	7,170,459	7,831,561	22,238,971
FNS SHARE	0	26,225	176,724	186,662	598,234	1,656,376	1,809,091	4,453,312
FNS %	0	13.65	13.65	13.65	13.65	23.10	23.10	20.02
CIS OPERATIONS	12,218,118	11,954,777	11,647,473	11,029,378	10,141,203	10,308,760	10,488,045	77,787,754
FNS SHARE	1,667,773	1,631,828	1,589,880	1,505,511	1,384,275	2,381,324	2,422,739	12,583,330
FNS %	13.65	13.65	13.65	13.65	13.65	23.10	23.10	16.18
CIS TOTAL BUDGET	12,302,200	13,498,110	14,356,609	14,211,033	16,981,673	20,858,104	18,319,606	110,527,335
FNS SHARE	1,671,051	1,750,625	1,856,407	1,828,005	2,257,750	4,690,313	4,231,830	18,285,981
FNS %	13.58	12.97	12.93	12.86	13.30	22.49	23.10	16.54

**Exhibit A-7.2**  
**CIS Operational Costs**  
**Actual Costs for FFY 1991, FFY 1992, and Partial FFY 1993\***

PERSONAL SERVICES AND RELATED COSTS										
	CIS COST POOL			CIS BALANCE COST POOL			(g) Total FSP % (b+c) + (e+f)	CIS OVERHEAD COST POOL		
	(a) Total	(b) Food Stamp Program Share	(c) FSP %	(d) Total	(e) Food Stamp Program Share	(f) FSP %		(h) Total	(i) Food Stamp Program Share	(j) FSP %
FFY91 QTR 1	878,499	148,027	16.85	138,697	34,036	24.54	19.95	1,353,757	228,108	16.85
QTR 2	891,211	176,727	19.83	151,176	42,148	27.88	23.45	2,908,533	576,762	19.83
QTR 3	849,356	168,852	19.88	149,013	41,530	27.87	23.61	903,859	179,687	129.88
QTR 4	942,822	198,558	21.06	124,539	36,291	29.14	23.99	5,060,036	1,065,644	21.06
<b>FFY91 Total</b>	<b>3,561,888</b>	<b>692,164</b>	<b>19.43</b>	<b>563,425</b>	<b>154,005</b>	<b>27.33</b>	<b>22.77</b>	<b>10,226,185</b>	<b>2,050,201</b>	<b>20.05</b>
FFY92 QTR 1	946,586	187,235	19.78	149,681	41,462	27.70	23.15	1,989,209	393,466	19.78
QTR 2	929,286	194,685	20.95	121,385	34,983	28.82	23.82	2,756,101	577,403	20.95
QTR 3	884,197	172,330	19.49	137,852	36,710	26.63	22.70	1,957,183	381,455	19.49
QTR 4	1,037,351	206,433	19.90	161,855	44,138	27.27	23.17	4,479,550	891,430	19.90
<b>FFY92 Total</b>	<b>3,797,420</b>	<b>760,683</b>	<b>20.03</b>	<b>570,773</b>	<b>157,293</b>	<b>27.56</b>	<b>23.21</b>	<b>11,182,043</b>	<b>2,243,754</b>	<b>20.07</b>
FFY93 QTR 1	966,407	175,886	18.20	203,898	51,443	25.23	22.33	1,761,462	320,586	18.20

\* Source: Illinois Bureau of Fiscal Operations, Federal/State Coordination Unit

**Exhibit A-7.3**  
**CIS Cost Allocation to the Food Stamp Program**

To determine the share of CIS costs to be allocated to the Food Stamp Program:

**Step 1. Calculate the personal services and benefits costs attributable to FSP for Cook County, Downstate & Central Office for *Administrative (Admin) & Clerical workers*:**

- *INTAKE workers*, based on applications processed by program/allocated to programs
- *Caseworkers*, based on caseload assignment/allocated to programs supported
- *Administrative & Clerical workers*, allocated based on INTAKE & Caseworker % allocations, as follows:

If: Total INTAKE is \$200,000, with, \$50,000 attributed to FSP activities;

Total Caseworker is \$400,000, with \$80,000 attributed to FSP activities;  
and

Total Admin/Clerical was \$150,000

then: Total INTAKE + Caseworker = \$600,000; and

Total INTAKE + Caseworker allocated to FSP = \$130,000

therefore:

ADMIN/Clerical allocation % would be 21.67%, based on:

Total % FSP  $\frac{(\text{INTAKE} + \text{Caseworker})}{\text{Total INTAKE} + \text{Caseworker}}$ , or

$$130,000 \div 600,000 = .2167 \text{ or } 21.67\% \times \$150,000 = \$32,505$$

**Step 2. Calculate percentage of CIS costs to be allocated to FNS:**

For Cook County, downstate, and central office, total the FSP allocations for INTAKE, Caseworker, and Admin/Clerical; then, divide by the total allocation to CIS for INTAKE, Caseworker, and Admin/Clerical.

In the above example:

$$(\$50,000 + \$80,000 + \$32,505) \div (\$200,000 + \$400,000 + \$150,000) =$$

$$\$162,505 \div \$750,000 = 21.67\%$$

**APPENDIX B**

**STATE OF ILLINOIS**

**ANALYSIS OF OPERATOR USER SATISFACTION SURVEYS**

## OVERVIEW

This appendix presents the results of the Operational Level User Satisfaction Survey. Frequency counts of responses to all applicable items on the survey are included, grouped by the topic covered by the item. The results for the items covering each topic are summarized as well.

The responses to the Operational Level User Satisfaction Survey are the perceptions of eligibility workers in Illinois. In other words, these responses do not necessarily represent a "true" description of the situation in Illinois. For example, the results presented regarding the response time of the system reflect the workers' perceptions about that response time, not an objective measure of the actual speed of the response.

### Description of the Sample

The following table summarizes the potential population size and the final size of the sample who responded.

Number of EWS in Illinois	Number Selected to Receive Survey	Percentage Selected
2,109	63	3.0%
	Number Responding to Survey	Response Rate
	17	30.0%

The eligibility workers selected to receive the survey were selected randomly so their perceptions should be representative of eligibility workers in Illinois. The response rate of 30 percent is low. The low response rate produces a sample whose responses may not be representative of eligibility workers in Illinois.

### Summary of Findings

Most of the eligibility workers are satisfied with the computer system in Illinois. They generally find it responsive, accurate, and easy to learn. There is, however, significant disagreement with these views, with around as one third of the workers reporting problems accomplishing specific tasks or difficulty using the system. Most respondents think the computer system helps them do their jobs and makes them more efficient, although 44 percent feel the system adds stress to their jobs.

Since the current Illinois system has been operational since 1987, comparisons between the current and previous systems would be of limited value. Responses to comparative questions, therefore, are not solicited for systems that were implemented more than five years ago.

## SYSTEM CHARACTERISTICS

### Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents (%)
Poor	2	11.8
Good	12	70.6
Excellent	3	17.6

What is the quality of system response time during peak periods?

	Number of Respondents	Percentage of Respondents (%)
Poor	4	23.5
Good	12	70.6
Excellent	1	5.9

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents (%)
Rarely	3	17.6
Sometimes	11	64.7
Often	3	17.6

The eligibility workers who responded almost all agree that the system's response time is usually good or excellent but a majority (82 percent) agree that response time is sometimes or often slow.

### Availability

How often is the system available when you need to use it?

	Number of Respondents	Percentage of Respondents (%)
Rarely	2	12.5
Sometimes	1	6.3
Often	13	81.2

How often is the system down?

	Number of Respondents	Percentage of Respondents (%)
Rarely	3	17.6
Sometimes	11	64.7
Often	3	17.6

A large majority (88 percent) of the eligibility workers who responded think the system is generally available although a smaller majority (82 percent) agrees that it is sometimes or often down.

### Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents (%)
Good	14	82.4
Excellent	3	17.6



How often is a case terminated in error?

	Number of Respondents	Percentage of Respondents (%)
Rarely	10	58.8
Sometimes	6	35.3
Often	1	5.9

How often is eligibility incorrectly determined?

	Number of Respondents	Percentage of Respondents (%)
Rarely	10	62.5
Sometimes	6	37.5

How often is the systems data out-of-date?

	Number of Respondents	Percentage of Respondents (%)
Rarely	12	70.6
Sometimes	4	23.5
Often	1	5.9

The eligibility workers who responded generally feel that the operations of the system are accurate although about one third indicate problems with the system such as out-of-date data and incorrect eligibility determination. All who responded think the information in the system is either good or excellent.

### **Ease of Use**

How often do you have difficulty obtaining necessary information from the system?

	Number of Respondents	Percentage of Respondents (%)
Rarely	11	68.8
Sometimes	4	25.0
Often	1	6.3

How often do you have difficulty learning to use the system?

	Number of Respondents	Percentage of Respondents (%)
Rarely	13	76.5
Sometimes	3	17.6
Often	1	5.9

How often do you have difficulty tracking receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents (%)
Rarely	9	60.0
Sometimes	3	20.0
Often	3	20.0

How often do you have difficulty automatically terminating benefits for failure to file?

	Number of Respondents	Percentage of Respondents (%)
Rarely	10	66.7
Sometimes	4	26.7
Often	1	6.7

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents (%)
Rarely	11	64.7
Sometimes	4	23.5
Often	2	11.8

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents (%)
Rarely	12	75.0
Sometimes	3	18.8
Often	1	6.3

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents (%)
Rarely	12	75.0
Sometimes	4	25.0

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents (%)
Rarely	7	43.8
Sometimes	4	25.0
Often	5	31.3

How often do you have difficulty identifying recipients already known to the State?

	Number of Respondents	Percentage of Respondents (%)
Rarely	10	62.5
Sometimes	5	31.3
Often	1	6.3

How often do you have difficulty updating registration data?

	Number of Respondents	Percentage of Respondents (%)
Rarely	9	56.3
Sometimes	5	31.3
Often	2	12.5

How often do you have difficulty updating eligibility and benefit information from recertification data?

	Number of Respondents	Percentage of Respondents (%)
Rarely	10	58.8
Sometimes	6	35.3
Often	1	5.9

How often do you have difficulty identifying cases which are overdue for recertification?

	Number of Respondents	Percentage of Respondents(%)
Rarely	13	76.5
Sometimes	2	11.8
Often	2	11.8

How often do you have difficulty monitoring the status of all hearings?

	Number of Respondents	Percentage of Respondents(%)
Rarely	6	75.0
Sometimes	1	12.5
Often	1	12.5

How often do you have difficulty tracking outstanding verifications?

	Number of Respondents	Percentage of Respondents(%)
Rarely	6	60.0
Sometimes	3	30.0
Often	1	10.0

How often do you have difficulty automatically notifying households of case actions?

	Number of Respondents	Percentage of Respondents (%)
Rarely	9	56.3
Sometimes	6	37.5
Often	1	6.3

How often do you have difficulty notifying recipients that recertification is required?

	Number of Respondents	Percentage of Respondents (%)
Rarely	9	60.0
Sometimes	3	20.0
Often	3	20.0

How often do you have difficulty identifying cases making payments through recoupment?

	Number of Respondents	Percentage of Respondents (%)
Rarely	13	76.5
Sometimes	1	5.9
Often	3	17.6

How often do you have difficulty identifying error prone cases?

	Number of Respondents	Percentage of Respondents (%)
Rarely	7	53.8
Sometimes	3	23.1
Often	3	23.1

How often do you have difficulty identifying cases involving suspected fraud?

	Number of Respondents	Percentage of Respondents (%)
Rarely	7	50.0
Sometimes	2	14.3
Often	5	35.7

How often do you have difficulty assigning new case numbers?

	Number of Respondents	Percentage of Respondents (%)
Rarely	10	76.9
Sometimes	1	7.7
Often	2	15.4

A majority of the eligibility workers responding do not have difficulty performing any of the system-specific tasks such as assigning new case numbers or generating adverse action notices but there are significant percentages, usually around 35 percent, who do experience some difficulty performing these tasks. In fact, a majority, 56 percent, report difficulty in restoring benefits.

#### **FOOD STAMP PROGRAM NEEDS**

##### **Worker Satisfaction Levels**

How often is the system a great help to you in your job?

	Number of Respondents	Percentage of Respondents (%)
Rarely	1	5.9
Often	16	94.1

How often is the system an added stress in your job?

	Number of Respondents	Percentage of Respondents (%)
Rarely	9	56.3
Sometimes	7	43.8

How often is the system more of a problem than a help?

	Number of Respondents	Percentage of Respondents (%)
Rarely	15	88.2
Sometimes	2	11.8

Almost all, 94 percent, of the eligibility workers who responded think that the current system is a great help to them in their work although 44 percent report that it adds stress to their jobs.

#### **Client Service**

How often is expedited service difficult to achieve?

	Number of Respondents	Percentage of Respondents (%)
Rarely	10	66.7
Sometimes	4	26.7
Often	1	6.7

How often do you have difficulty providing expedited services?

	Number of Respondents	Percentage of Respondents (%)
Rarely	8	61.5
Sometimes	5	38.5

Most of the eligibility workers who responded agree that expedited service is rarely difficult to provide.



**Client Service**

No data are available to address client service because all the questions in this category compare the current and previous systems. Since the Illinois system was implemented more than five years ago, comparative questions are not applicable.

**Fraud and Errors**

No data are available to address fraud and errors because all the questions in this category compare the current and previous systems. Since the Illinois system was implemented more than five years ago, comparative questions are not applicable.

**APPENDIX C**

**STATE OF ILLINOIS**

**ANALYSIS OF MANAGERIAL USER SATISFACTION SURVEYS**

## OVERVIEW

This appendix presents the results of the Managerial Level User Satisfaction Survey. Frequency counts of responses to all items on the survey are included, grouped by the topic covered by the item. The results for the items covering each topic are summarized as well.

The responses to the Managerial Level User Satisfaction Survey are the perceptions of supervisors in Illinois. In other words, these responses do not necessarily represent a "true" description of the situation in Illinois. For example, the results presented regarding the response time of the system reflect the managers' perceptions about that response time, not an objective measure of

The following table summarizes the potential population size and the final size of the sample who responded.

Number of Supervisors in Illinois	Number Selected to Receive Survey	Percentage Selected
566	30	5.3
	Number Responding to Survey	Response Rate
	7	23.3%

The supervisors selected to receive the survey were selected randomly so their perceptions should be representative of the population of supervisors in Illinois. The total number of respondents, however, is low. The low response rate produces a sample whose responses may not be representative of this random selection.

## Summary of Findings

## SYSTEM CHARACTERISTICS

### Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents
Good	5	71.4
Excellent	2	28.6

What is the quality of system response time during peak periods?

	Number of Respondents	Percentage of Respondents
Poor	1	14.3
Good	4	57.1
Excellent	2	28.6

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents
Rarely	2	28.6
Sometimes	5	71.4

The supervisors who responded all agree that the system's response time is generally good or excellent although 71 percent also feel that the system response time is sometimes too slow.

### Availability

How often is the system available when you need to use it?

	Number of Respondents	Percentage of Respondents
Often	7	100.0

How often is the system down?

	Number of Respondents	Percentage of Respondents
Rarely	2	28.6
Sometimes	5	71.4

All the supervisors who responded think the system is generally available but again 71 percent feel that the system is down sometimes.

### Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents
Poor	1	14.3
Good	2	28.6
Excellent	4	57.1

The supervisors who responded generally find the information and algorithms of the system to be accurate. Most of them think the information in the system is either good or excellent.

### Ease of Use

How often do you have difficulty obtaining necessary information from the system?

	Number of Respondents	Percentage of Respondents
Rarely	4	57.1
Sometimes	3	42.9

How often do you have difficulty learning to use the system?

	Number of Respondents	Percentage of Respondents
Rarely	6	85.7
Sometimes	1	14.3

How often do you have difficulty tracking receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents
Rarely	4	80.0
Sometimes	1	20.0

How often do you have difficulty automatically terminating benefits for failure to file?

	Number of Respondents	Percentage of Respondents
Rarely	4	100.0

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents
Rarely	6	100.0

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents
Rarely	4	80.0
Sometimes	1	20.0

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents
Rarely	4	80.0
Often	1	20.0

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents
Rarely	3	50.0
Sometimes	2	33.3
Often	1	16.7

Most of the supervisors responding have no difficulty obtaining information or learning the system. Those who responded generally do not have difficulty performing such specific tasks as generating adverse action notices or restoring benefits.

## FOOD STAMP PROGRAM NEEDS

### Supervisor Satisfaction Levels

How often is the system a great help to you in your job?

	Number of Respondents	Percentage of Respondents
Rarely	1	14.3
Often	6	85.7

How often is the system an added stress in your job?

	Number of Respondents	Percentage of Respondents
Rarely	3	42.9
Sometimes	3	42.9
Often	1	14.3

Most of the supervisors who responded (86 percent) think that the current system is a great help to them in their work but a majority (57 percent) feel that it contributes added stress.

### Management Needs

What is the quality of the reports produced by the system?

	Number of Respondents	Percentage of Respondents
Poor	2	28.6
Good	3	42.9
Excellent	2	28.6



What is the quality of the support provided by the technical staff supporting the automated system?

	Number of Respondents	Percentage of Respondents
Good	5	71.4
Excellent	2	28.6

How often do you have difficulty making mass changes to the system?

	Number of Respondents	Percentage of Respondents
Rarely	1	25.0
Sometimes	2	50.0
Often	1	25.0

How often do you have difficulty meeting Federal reporting requirements?

	Number of Respondents	Percentage of Respondents
Rarely	4	66.7
Sometimes	2	33.3

Most of the supervisors responding think the system helps them in their management tasks, although 75 percent reported difficulty in making mass changes. Most think the reports produced by the system are good and all agree that the quality of the support provided by the technical staff is good or excellent.

#### **Client Service**

No data are available to address client service because all the questions in this category compare the current and previous systems. Since the Illionois system was implemented more than five years ago, comparative questions are not applicable.

**Fraud and Errors**

No data are available to address fraud and errors because all the questions in this category compare the current and previous systems. Since the Illinois system was implemented more than five years ago, comparative questions are not applicable.